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TEXAS INSTRUMENTS INCORPORATED			FIGUEROA, MARISOL	
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DALLAS, TA	75205		2681	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/769,242	GILKES ET AL.
Office Action Summary	Examiner	Art Unit
	Marisol Figueroa	2681
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I. sely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on <u>30 Ja</u> This action is <b>FINAL</b> . 2b)☑ This     Since this application is in condition for allowant closed in accordance with the practice under E	action is non-final. ace except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 9-15 and 28-31 is/are pending in the a 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 9-15 and 28-31 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.	
Application Papers		
9) ☐ The specification is objected to by the Examiner 10) ☑ The drawing(s) filed on 30 January 2004 is/are: Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction. The oath or declaration is objected to by the Examiner.	a) $\square$ accepted or b) $\square$ objected drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the priority application from the International Bureau</li> <li>* See the attached detailed Office action for a list of the certified copies of the priority</li> </ul>	s have been received. s have been received in Applicati ity documents have been receive I (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	

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#### **DETAILED ACTION**

### Preliminary Amendment

1. Claims 1-8, and 16-27 were canceled before examination on a Preliminary Amendment filed on January 30, 2004. Claims 9-15, and 28-31 are now pending in the present application.

## Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13 and 29 contain the trademark/trade name Bluetooth. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See Ex parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a wireless device and, accordingly, the identification/description is indefinite.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 9-12, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Dunne et al. US 6,745,036 B1.

Regarding claim 9, Dunne discloses a method of determining the location of a wireless mobile communication device operating in a wireless communication system (abstract, lines 1-3), comprising:

the wireless mobile communication device transmitting a first wireless signal at a predetermined transmission power level (abstract, lines 3-5; col.2, lines 40-44);

receiving the first wireless signal at a known location and transmitting a second wireless signal from the known location in response to the first wireless signal (abstract, lines 5-12; col.2, lines 45-50);

and determining the location of the wireless mobile communication device based on the second wireless signal and the predetermined transmission power level (abstract, lines 8-21; col.5, lines 66 – col.6, lines 1-13; col.8, lines 5-13; col.8, lines 45-58; note that PP is acronym for portable parts also meaning portable terminal, i.e. wireless communication device).

Regarding claim 10, Dunne discloses the method of claim 9, wherein the second wireless signal includes information indicative of the known location (col.3, lines 56-59; col.6, lines 3-13; the output signal, i.e. second wireless signal, contains information of the identity of the location beacon which identifies the location of the location beacon to the central control unit that holds information relating to the actual position of the location beacons).

Regarding claim 11, Dunne discloses the method of claim 9, wherein said step of receiving

the first wireless signal includes receiving the first wireless signal at a plurality of known locations (abstract, lines 5-8; col.3, lines 36-40; the portable terminal transmits identity information at a predetermined power level that is received by location beacons), and wherein said step of transmitting a second wireless signal includes transmitting a second wireless signal from each of the plurality of known locations (abstract, lines 8-12; each location beacon transmits an output signal in response to the identity signal), said determining step including determining that the wireless mobile communication device is located within a predetermined distance of each of the plurality of known locations from which the second wireless signal has been transmitted (abstract, lines 12-21; ).

Regarding claim 12, Dunne discloses the method of claim 9, wherein said determining step includes determining that the wireless mobile communication device is located within a predetermined distance of the known location (abstract, lines 12-21).

Regarding claim 14, Dunne discloses the method of claim 9, including identifying the known location based on the second wireless signal (col.3, lines 56-59; col.6, lines 3-13; the output signal, i.e. second wireless signal, contains information of the identity of the location beacon which identifies the location of the location beacon to the central control unit that holds information relating to the actual position of the location beacons).

5. Claims 9, 14, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Santhoff US 2004/0002346 A1.

Regarding claim 9, Santhoff discloses a method of determining the location of a wireless mobile communication device operating in a wireless communication system (p.0038, lines 1-5), comprising:

the wireless mobile communication device transmitting a first wireless signal at a predetermined transmission power level (p.0033, lines 1-4; p.0038, lines 5-9; p.0096, lines 1-5; a

mobile wireless device having a unknown geographic location transmits an initial request to fixed position wireless devices, in the prefered embodiment the wireless device employs ultra-wideband radio that may transmit UWB pulses, or signals at a fixed power level or the power of transmission of the UWB pulse);

receiving the first wireless signal at a known location and transmitting a second wireless signal from the known location in response to the first wireless signal (p.0038, lines 5-17; the fixed position wireless devices having known geographic locations receive the initial request and transmit in response positioning information to the first mobile wireless device); and

determining the location of the wireless mobile communication device based on the second wireless signal and the predetermined transmission power level (p.0040, lines 1-8; p.0042; p.0046, lines 1-6; the first mobile wireless device determines its location from the received signals from the fixed wireless devices which were received in response to the first wireless signal with a fixed power level).

Regarding claim 14, Santhoff discloses the method of claim 9, including identifying the known location based on the second wireless signal (p.0042, lines 11-20; p.0046, lines 1-6; the response signals from the fixed wireless devices are embedded with its geographic position).

Regarding claim 15, Santhoff discloses the method of claim 14, wherein said identifying step includes the wireless mobile communication device receiving the second wireless signal and identifying the known location based on the second wireless signal (p.0042, lines 11-20; p.0046, lines 1-6; the response signals from the fixed wireless devices with known location are embedded with its geographical position and also information of its time of transmission, the wireless device receives these signals and with this information can triangulate and accurately determine its geographical position).

Regarding claim 28, Santhoff discloses a wireless mobile communication device, comprising:

an output for transmitting a wireless signal at a predetermined transmission power level (Figure 3; p.0043; lines 5-13; p.0033, lines 1-4; p.0038, lines 5-9; p.0096, lines 1-5; the mobile wireless includes a transmitter 302 to transmit an initial request to fixed position wireless devices, in the prefered embodiment the wireless device employs ultra-wideband radio that may transmit UWB pulses, or signals at a fixed power level or the power of transmission of the UWB pulse;

an input for receiving a wireless response to said wireless signal, said wireless response including information indicative of a location of a source of said response (Figure 3; p.0043; lines 5-13; p.0038, lines 5-17; p.0042, lines 11-20; the mobile wireless devices includes a receiver 304 to receive a response from the fixed position wireless devices having known geographic locations, the response includes the geographic position of the fixed position wireless devices) and

a location determiner coupled to said input and responsive to said information and said predetermined transmission power level for determining a location of said wireless mobile communication device (Figure 3; p.0046, lines 1-10; the mobile wireless device includes a location component determine its location from the received signals from the fixed wireless devices which were received in response to the first wireless signal with a fixed power level).

Regarding claim 30, Santhoff discloses the wireless mobile communication device of claim 28, wherein said input is for receiving a plurality of wireless responses to said wireless signal, each of said wireless responses including information indicative of a location of a source of said wireless response (Figure 3; p.0043; lines 5-13; p.0038, lines 5-17; p.0042, lines 11-20; the mobile wireless devices includes a receiver 304 to receive a response from the fixed position wireless devices having known geographic locations, the response includes the geographic position of the fixed position

wireless devices), said location determiner responsive to said predetermined transmission power level and said information in said plurality of wireless responses for determining the location of said wireless mobile communication device (Figure 3; p.0046, lines 1-10; the mobile wireless device includes a location component determine its location from the received signals from the fixed wireless devices which were received in response to the first wireless signal with a fixed power level).

Regarding claim 31, Santhoff discloses the wireless mobile communication device of claim 30, wherein said location determiner is operable for determining that said wireless mobile communication device is located within a predetermined distance of each of the plurality of sources (p.0046, lines 1-10).

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Santhoff.

Regarding claim 13, Santhoff discloses the method of claim 9, but fails to disclose wherein the wireless mobile communication device is a Bluetooth device. However Santhoff in another embodiment the mobile wireless device may be equipped with a UWB receiver and a narrowband transceiver to transmit an initial request, i.e. emergency call, to fixed access points in order to receive geo-position beacon signals to assist in calculating its position, one example of narrowband communication technology is Bluetooth (p.0091-0093). Therefore, it would have been obvious to

one having ordinary skill in the art at the time of the invention for a Bluetooth device to determine its position as suggested by Santhoff, because Santhoff invention also provides for wireless devices with narrowband transceivers such as Bluetooth, to sent a signal to initiate a location determination process.

Regarding claim 29, the claim is rejected over the same reasons stated about claim 13 as it recites the same limitations of claim 13. See remarks about claim 13 above.

#### Prior Art of Record

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - (1) KARAOGUZ (US 2004/0203989 A1) Using Location Information to Control Transmission Signals Levels of Wireless Devices.
  - (2) SOLIMAN (WO 01/58098 A2) Position Determination Using Bluetooth Devices
  - (3) MARTORANA (US 2002/0155845 A1) Method and Apparatus for High-Accuracy Position Location Using Search Mode Ranging Techniques.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marisol Figueroa whose telephone number is (571) 272-7840. The examiner can normally be reached on Monday Thru Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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SUPERVISORY PATENT EXAMINER